



Effect weed management practices and fertility levels on soil health in finger millet–groundnut cropping system

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Abstract : The application of herbicide like butachlor and 2, 4- D Na salt each at 0.75 kg ai/ha in finger millet and, butachlor and pendimethalin each at 1.0 kg ai/ha in the succeeding groundnut showed higher microbial biomass in the soil at harvest as compared to hand weeding or unweeded control. Usage of butachlor and 2,4-D Na salt in finger millet and butachlor 0.75 to 1.0 kg ai/ha and pendimethalin 1.0 kg ai/ha in groundnut helped in retaining higher N, P₂O₅ and K₂O nutrient status in soil, as compared to hand weeding and unweeded control. Owing to better control of weeds in the cropping system of finger millet - groundnut, application of FYM along with recommended fertilizer recorded significantly higher available nitrogen, phosphorus and potassium in the soil as compared to mere application of recommended NPK alone. Application of recommended NPK + FYM treatment maintained neutral pH, where as only recommended NPK alone treatment caused reduction of soil pH (acidic).

Key Words : Weed management practices, Finger millet, Groundnut, Fertility levels

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